15. DATA SHEETS

SUMMARY OF HYDRAULIC BRAKE HOSE TESTING RESULTS

GRP NO.: ___ ; NOM. HOSE ID: ___"; VEH MFR: _____; PART NO.: _____

HOSE ASSY. MFR.: _____ PART NO.: _____

HOSE STOCK MFR.: _____

TYPE OF HOSE ASSYS.: _____-Veh. Specific*; _____-Aftermarket (NON-OEM); _____-Special Test*
* These types of assemblies are NOT SUBJECT to Label Inspection PASS/FAIL criteria.

SUMMARY: (INDICATE P - PASS, F - FAIL, N/A - NOT APPLICABLE)

		HOSE NUMBER																			
Test No.	**TEST**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**Spare**
1	LABEL INSPECTION																				
2	CONSTRIC. TEST																				
3	EXPANSION TEST																				
4	BURST TEST																				
5	WHIP TEST																				
6	TENSILE TEST																				
7	COLD BOX TEST																				
8	SALTSPRAY TEST																				
9	OZONE TEST																				
10	WATER ABSORP.																				
11	BRK.FLUID COMPAT.																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Spare

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-1A

HYDRAULIC BRAKE HOSE LABELING INSPECTION - HOSE

GROUP NO.: _____ TEST DATE: _____

TYPE OF HOSE ASSYS.: ___-Veh. Specific; ___-Aftermarket (NON-OEM); ___-Special Test

MARKINGS ON HOSE: DOT LINE- _____
OTHER LINE-

TORQUE STRIPES* (2) ON HOSE: ___-Yes; ___-No
*Required on AFTERMARKET ASSYS only

PASS	FAIL	N/A

DATE CODE ON HOSES			
HOSE NO.	**DATE CODE**	**HOSE NO.**	**DATE CODE**
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		Spare	

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-1B

HYDRAULIC BRAKE HOSE LABELING INSPECTION - ASSEMBLY

GROUP NO.: _____ TEST DATE: _____

TYPE HOSE ASSYS.: ___-Veh. Specific; ___-Aftermarket (NON-OEM); ___-Special Test

MARKINGS ON BAND*: _____
(Metal Band unless otherwise noted)
If band is NOT present, check Data Sheet H-1C
Option Selection for PASS/FAIL judgement for
AFTERMARKET ASSEMBLIES

PASS	FAIL	N/A

* If marking on any hose assembly band is different than recorded above, copy the marking and identify by hose number in the space below.

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-1C

HYDRAULIC BRAKE HOSE LABELING INSPECTION - END FITTINGS

GROUP NO.: _____ TEST DATE: _____

TYPE OF HOSE ASSYS.: _____-Vehicle Specific; _____-Aftermarket (NON-OEM); _____-Special Test
TYPE OF END FITTING: _____-Permanent; _____-Crimp/Swag; _____-Sleeve/Ferrule
MARKINGS ON END FITTINGS*: (Each hose assy end must be marked with an "A" or "B" by lab)
* If Band is NOT present, one fitting on Aftermarket Assys must have manufacturer's identification

HOSE NO.	"A" END _____	"B" END _____	PASS, FAIL, N/A
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
SPARE			

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-2

HYDRAULIC BRAKE HOSE CONSTRICTION TEST

GROUP NO.: _____; TEST DATE: _____; HOSE NOMINAL I.D.: _____"

AMB. TEMP.: ___ºF; PLUG SIZE USED: _____" (NOTE: _____" Max Dia. for _____" ID hose)
Each end of the hose assembly must be marked with an "A" or "B" by the laboratory.
The constriction of the bore was measured at both ends using the size gage plug as shown above.

HOSE NO.	END	PASS	FAIL	MAX. DRILL SIZE
1	A B	----------	----------	----------
2	A B	----------	----------	----------
3	A B	----------	----------	----------
4	A B	----------	----------	----------
5	A B	----------	----------	----------
6	A B	----------	----------	----------
7	A B	----------	----------	----------
8	A B	----------	----------	----------
9	A B	----------	----------	----------
10	A B	----------	----------	----------
11	A B	----------	----------	----------
12	A B	----------	----------	----------
13	A B	----------	----------	----------
14	A B	----------	----------	----------
15	A B	----------	----------	----------
16	A B	----------	----------	----------
17	A B	----------	----------	----------
18	A B	----------	----------	----------
19	A B	----------	----------	----------
SPARE	A B	----------	----------	----------

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-3

HYDRAULIC BRAKE HOSE VOLUMETRIC EXPANSION TEST

GROUP NO.: _____ ; HOSE TYPE: _____ ; TEST DATE: _____

HOSE NOMINAL I.D.: _____"; EXPANSION AMBIENT TEMPERATURE: _____ºF

The free length (FL) of each specimen was measured in hundredths of an inch between the end fittings while hanging in a straight position.

The expansion reading was taken 3 times so that the final reading taken on the burette is the total of the 3 expansions. This reading divided by 3 is considered as the final volumetric expansion of the hose and recorded in hundredths of a cubic centimeter.

If at any time during the test, an air bubble flows out of the hose, repeat the test allowing at least 5 minutes for the hose to recover.

DO NOT MOVE THE HOSE BETWEEN THE THREE (3) EXPANSIONS!

Expansion @ 1000 psig: (____ cc/ft allowed)		**HOSE #1**	**HOSE #2**	**HOSE #3**	**HOSE #4**
Hose Free Length (FL), INCHES	FL				
Hose Free Length (FL), FEET	FL				
Expansions @ 1000 psig	#1				
	#2				
	#3				
TOTAL OF THREE EXPANSIONS	T				
AVERAGE = TOTAL/3	A				
EXPANSION (ACTUAL/FL (feet)	E				
Expansion @ 1500 psig: (____ cc/ft allowed)		**HOSE #1**	**HOSE #2**	**HOSE #3**	**HOSE #4**
Expansions @ 1500 psig	#1				
	#2				
	#3				
TOTAL OF THREE EXPANSIONS	T				
AVERAGE = TOTAL/3	A				
EXPANSION (ACTUAL/FL (feet)	E				
PASS					
FAIL					

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

DATA SHEET H-4

HYDRAULIC BRAKE HOSE BURST STRENGTH TEST

GROUP NO.: _____ ; HOSE TYPE: _____ ; TEST DATE: _____

AMBIENT TEMPERATURE: _____ ºF

The hose was connected to the pressure source and completely filled with water.

After all air was eliminated in the hose, the relief valve was closed and pressure applied at the rate of 12,000 to 18,000 psi per minute until it reached the hold pressure of 3,800 to 4,000 psi for 110 to 120 seconds.

At the expiration of the 2 minute hold period, the pressure was increased at the rate specified above until the specimen burst or reached 5,000 psig minimum.

HOSE NUMBER	ACTUAL PRESSURE ATTAINED, psig	MINIMUM ALLOWABLE BURST STRENGTH	PASS	FAIL
1		5,000 psig		
2		5,000 psig		
3		5,000 psig		
4		5,000 psig		

REMARKS:

RECORDED BY: _____ DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-5
HYDRAULIC BRAKE HOSE WHIP (FATIGUE) TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

	TIME	**DATE**
START OF TEST		
END OF TEST		
TOTAL ELAPSED TEST TIME (hours) =		

The free length of each specimen was measured to within a tolerance of 0.015" between the end fittings while hanging in a straight position.

Water pressure of 220 to 235 psig was applied, and the hose and passages bled to eliminate air pockets or bubbles. The machine speed was 780 to 800 rpm, and total whip running time wa a minimum of 40 hours.

See TP Table 2 for "Slack" requirements.

Inspect condition of the hoses after 35 hours and 40 hours of whip test running time. PASS/FAIL shall be based upon the condition at the 35 hour inspection.

NOTE: Measurements in thousands of an inch.		**HOSE #5**	**HOSE #6**	**HOSE #7**	**HOSE #8**
Hose Free Length	FL				
Slack Setting	SS				
Machine Setup Length (FL - SS)	MSL				
Line Pressure (220 to 235 psig)	LP				
Whip Test Running Time, hours (Minimum = 40 hours)	ET				

HOSE CONDITION AT 35 HOURS AND AT 40 HOURS				
HOSE NO.	**AT 35 HOURS**	**AT 40 HOURS**	**DETERMINED @ 35 HRS**	
			PASS	**FAIL**
5				
6				
7				
8				

RECORDED BY: _____ ; DATE:

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-6

HYDRAULIC BRAKE HOSE TENSILE TEST

GROUP NO.: _____ ; TEST DATE: _____ ; AMBIENT TEMP.: _____ ºF
The hose assembly was mounted in the tensile machine so that the hose and end fittings had a straight centerline corresponding to the direction of the machine pull.

The hose assembly was pulled at a rate of 1 inch/minute until failing as follows:

A. Hose pulled out of the end fitting
B. Hose ruptured

HOSE NO.	ACTUAL TOTAL LOAD AT TIME OF FAILURE (lbs)	TYPE OF FAILURE "A" or "B"	MIN. ALLOW. TENSILE STRENGTH (lbs)	PASS	FAIL
9					
10					
11					
12					

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-7

HYDRAULIC BRAKE HOSE COLD BOX TEST

GROUP NO.: _____ ; HOSE DIAMETER: _____ inches

The hose assembly was conditioned in the cold box in a straight position or natural position at -35ºF to -40ºF for 70 hours.

After the conditioning period and while still at this temperature, the hose assembly was bent around a wood mandrel of the diameter noted in the "REMARKS" section.

All cracks and breaks are noted below.

HOSE #13	DATE	TIME	BOX TEMPERATURE (ºF)	EVIDENCE OF CRACKS OR BREAKS
IN BOX				
OUT BOX				
TOTAL EXPOSURE TIME =				

TEST RESULTS:

PASS	FAIL

Wood Mandrel diameter used = _____ inches

HOSE NOMINAL I.D.	TEST CYLINDER DIAMETER(+ 0.03, - 0)
LESS THAN 1/8"	2.50"
1/8"	3.00"
3/16" AND 1/4"	3.50"
GREATER THAN 1/4"	4.00"

REMARKS:
External Inspection -

Internal Inspection -

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-8

HYDRAULIC BRAKE HOSE SALT SPRAY TEST - 24 HOURS

GROUP NO.: _____

The hose assembly was subjected to a Salt Spray test for 24 hours in accordance with the testing method of Salt Spray (Fog) Testing ASTM B117-64.

The temperature in the salt chamber was continuously recorded.

HOSE #14	DATE	TIME	SALT SOLUTION PROP.		EVIDENCE OF RUST OR CORROSION
			Sp.Gr.@95±2ºF	Ph	
IN Cabinet					
OUT Cabinet					

TEST RESULTS:

PASS	FAIL

REMARKS: (Note all interruptions in test, cause, and length of time)

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-9

HYDRAULIC BRAKE HOSE OZONE TEST - 70 HOURS

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE NO.: 15 ; HOSE NOMINAL O.D.: _____ inches

CYLINDER DIAMETER = 8 x HOSE NOMINAL O.D. = _____ inches

	TIME	**DATE**
START OF TEST		
END OF TEST		
TOTAL EXPOSURE TIME (hours) =		

The brake hose was bound around a cylinder with a diameter of _____ inches and conditioned at room temperature for 24 hours.

The brake hose and cylinder were then exposed to an ozone concentration of 50 parts per 100 million by volume for 70 hours at a temperature of 98 to 104ºF.

Examination of the hose under 7-power magnification yielded the following results -

TEST RESULTS:

PASS	**FAIL**

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-10A

HYDRAULIC BRAKE HOSE WATER ABSORPTION - BURST TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE FREE LENGTH: _____ inches ; HOSE NOMINAL I.D.: _____ inches

	TIME	**DATE**
START OF TEST		
END OF TEST		
TOTAL IMMERSION TIME (hours) =		

The hose was prepared and immersed in distilled water at room temperature for 68 to 70 hours. Within 30 minutes after removal from the water, the Burst Strength Test was conducted in accordance with TP Paragraph 12.A.4.

HOSE NUMBER	**ACTUAL PRESSURE ATTAINED, psig**	**MINIMUM ALLOWABLE BURST STRENGTH**	**PASS**	**FAIL**
16		5,000 psig		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-10B

HYDRAULIC BRAKE HOSE WATER ABSORPTION - WHIP TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE FREE LENGTH: _____ inches ; HOSE NOMINAL I.D.: _____ inches

	TIME	**DATE**
START OF IMMERSION TIME		
END OF IMMERSION TIME		
TOTAL IMMERSION TIME (hours) =		

The hose was prepared and immersed in distilled water at room temperature for 65 to 70 hours. Within 30 minutes after removal from the water, the Whip (Fatigue) Test was started in accordance with TP Paragraph 12.A.5.

Ambient Temperature = _____ ºF.	**TIME**	**DATE**
START OF WHIP TEST		
END OF WHIP TEST		
TOTAL WHIP TEST TIME (hours) =		

NOTE: Measurements in thousands of an inch.		**HOSE #17**
Hose Free Length	FL	
Slack Setting	SS	
Machine Setup Length (FL - SS)	MSL	
Line Pressure (220 to 235 psig)	LP	
Whip Test Running Time, hours (Min. = 40 hrs)	ET	

HOSE CONDITION AT 35 HOURS AND AT 40 HOURS				
HOSE NO.	**AT 35 HOURS**	**AT 40 HOURS**	**DETERMINED @ 35 HRS**	
			PASS	**FAIL**
17				

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-10C

HYDRAULIC BRAKE HOSE WATER ABSORPTION - TENSILE TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE FREE LENGTH: _____ inches ; HOSE NOMINAL I.D.: _____ inches

	TIME	**DATE**
START OF IMMERSION TIME		
END OF IMMERSION TIME		
TOTAL IMMERSION TIME (hours) =		

The hose was prepared and immersed in distilled water at room temperature for 65 to 70 hours. Within 30 minutes after removal from the water, the Tensile Strength Test was started in accordance with TP Paragraph 12.A.6.

HOSE NO.	**ACTUAL TOTAL LOAD AT TIME OF FAILURE (lbs)**	**TYPE OF FAILURE ("A" or "B")**	**MIN. ALLOW. TENSILE STRENGTH**	**PASS**	**FAIL**
18			325 lbs		

FAILURE TYPES: A = Hose pulled out of end fitting
B = Hose ruptured

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-11

HYDRAULIC BRAKE HOSE BRAKE FLUID COMPATIBILITY TEST

GROUP NO.: _____ ; HOSE NUMBER: _____

	TIME	**DATE**

START OF TEST TIME		
END OF TEST TIME		
TOTAL IMMERSION TIME (hours) =		

The hose was attached to a 1 pint reservoir of Compatibility fluid and placed vertically in an oven at 195 to 200ºF for 70 hours. After removal, the hose was cooled for 30 minutes.

Cool Period: Start Time - _____ End Time - _____

TOTAL Cool Time - _____

The Constriction Test was performed in accordance with the TP Paragraph 12.A.2.

HOSE NUMBER	END	PASS	FAIL
19	A		
	B		

The Burst Strength Test was performed in accordance with the TP Paragraph 12.A.4.

HOSE NUMBER	ACTUAL PRESSURE ATTAINED, psig	MINIMUM ALLOWABLE BURST STRENGTH	TYPE OF FAILURE
19		5,000 psig	

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET H-12
HYDRAULIC BRAKE HOSE TRACER CORD COLOR IDENTIFICATION TEST

GROUP NO.: _____ ; TEST DATE: _____

After completion of all tests, remove a portion of the hose outer cover in all NONFAILING samples to determine the color of the tracer cord woven into the outre braid; tracer cord may be woven into inner braid on some hose assemblies.

SPECIMEN NO.	CORD COLOR	R.M.A. IDENTIFICATION

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
SPARE		

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

SUMMARY OF AIR BRAKE HOSE TESTING RESULTS

GROUP NO.: _____ ; NOMINAL HOSE I.D.: _____ inches

VEHICLE MFR: _____; PART NO.: _____

HOSE ASSY MFR: _____; PART NO.: _____

HOSE STOCK MFR: _____

TYPE OF HOSE ASSY: ____-Veh Specific*; ____-Aftermarket (NON-OEM)*; ____-Special Test*
* These types of assys are NOT subject to Label Inspection PASS/FAIL criteria.

TYPE OF END FITTING: ____-Permanent; ____-Reusable; ____-Renewable

SUMMARY: (P = PASSED, F = FAILED, N/A = NOT APPLICABLE)

		HOSE NUMBER													
TEST NAME		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
01	Label Inspection														
02	Constriction Test														
03	High Temperature Test														
04	Cold Box Test														
05	Oil Resistance Test														
06	Ozone Test														
07	Length Change Test														
08	Adhesion Test														
09	Air Pressure Test														
10	Burst Test														
11	Tensile Test														
12	Water Absorption														
13	Zinc Chloride Test														
14	Salt Spray Test														
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-1A

AIR BRAKE HOSE LABELING INSPECTION - HOSE

GROUP NO.: _____ ; TEST DATE: _____

TYPE ASSY: ____-Veh Specific*; ____-Aftermarket (NON-OEM)*; ____-Special Test*

* These types of assys are NOT subject to Label Inspection PASS/FAIL criteria.

MARKINGS ON HOSE: DOT Line-

_____

Other Line-

HOSE NUMBER	DATE CODE ON HOSE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
SPARE	

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-1B

AIR BRAKE HOSE LABELING INSPECTION - ASSEMBLY

GROUP NO.: _____; AFTERMARKET ASSY: __-Yes/__-No; TEST DATE: _____

MARKINGS ON BAND:
(Metal band unless otherwise noted)

MARKING OPTION SELECTED: ____-Yes; ____-No
(If YES, see Data Sheet A-1C for PASS/FAIL judgment)

HOSE NO.	DOT MARK	MANUFACTURER'S MARK	PASS, FAIL or N/A
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-1C

AIR BRAKE HOSE LABELING INSPECTION - END FITTINGS

GROUP NO.: _____ ; TEST DATE: _____

TYPE OF END FITTINGS: ____-Permanent*; ____-Reusable; ____-Renewable
* NOT subject to Label Inspection PASS/FAIL criteria.

MARKINGS ON END FITTINGS:
(Each hose assy end must be marked with an "A" or "B" by the lab)

HOSE#	"A" END	"B" END	P,F,N*
1			

2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
SPARE			

- P = PASS, F = FAIL, N = NOT APPLICABLE

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-2

AIR BRAKE HOSE CONSTRICTION TEST

GROUP NO.: _____; TEST DATE: _____; HOSE NOMINAL I.D.: _____"

AMB.TEMP.: ___ºF; PLUG SIZE USED*: _____" (NOTE: _____" Max Dia. for _____" ID hose)
* See TP Paragraph 12.B.2 for proper plug size

Each end of the hose assembly must be marked with an "A" or "B" by the lab. The constriction of the bore was measured at both ends using the size gage plug as shown above.

HOSE NO.	END	PASS	FAIL	MAX. DRILL SIZE
1	A B	_____	_____	_____
2	A B	_____	_____	_____

3	A B	_____	_____	_____
4	A B	_____	_____	_____
5	A B	_____	_____	_____
6	A B	_____	_____	_____
7	A B	_____	_____	_____
8	A B	_____	_____	_____
9	A B	_____	_____	_____
10	A B	_____	_____	_____
11	A B	_____	_____	_____
12	A B	_____	_____	_____
13	A B	_____	_____	_____
14	A B	_____	_____	_____
SPARE	A B	_____	_____	_____

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-3

AIR BRAKE HOSE HIGH TEMPERATURE TEST

GROUP NO.: _____ ; HOSE NOMINAL I.D.: _____ inches

	TIME	**DATE**
START OF HIGH TEMPERATURE TEST		
END OF HIGH TEMPERATURE TEST		
TOTAL TEST TIME (hours) =		

Hose 1 was secured around a cylinder with a diameter of _____ inches and placed in an air oven for 70 hours at 207ºF to 212ºF. After removal and cooling, the hose was hand straightened and inspected.

TEST RESULTS:

PASS	FAIL

External Inspection - _____

Internal Inspection - _____

HOSE NOMINAL I.D.	TEST CYLINDER DIA. (+.03,-0)
1/8"	3.0"
3/16"	4.0"
1/4" OR 3/8" OD	5.0"
5/16"	6.0"
3/8" AND 11/32"	7.0"
7/16" AND 1/2"	8.0"
5/8"	9.0"

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-4

AIR BRAKE HOSE COLD BOX TEST

GROUP NO.: _____ ; HOSE NOMINAL I.D.: _____ inches

The hose assembly was conditioned in the cold box in a straight position or natural position at -35ºF to -40ºF for 70 hours.

After the conditioning period and while still at this temperature, the hose assembly was bent around a wood mandrel of the diameter noted in the "REMARKS" section.

All cracks and breaks are noted below.

HOSE #2	DATE	TIME	BOX TEMPERATURE (ºF)	EVIDENCE OF CRACKS OR BREAKS

IN BOX				
OUT BOX				
TOTAL EXPOSURE TIME =				

TEST RESULTS:

PASS	FAIL

Wood Mandrel diameter used = _____ inches

HOSE NOMINAL I.D.	TEST CYLINDER DIA. (+.03,-0)
1/8"	3.0"
3/16"	4.0"
1/4" OR 3/8" OD	5.0"
5/16"	6.0"
3/8" AND 13/32"	7.0"
7/16" AND 1/2"	8.0"
5/8"	9.0"

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-5
AIR BRAKE HOSE OIL RESISTANCE TEST

GROUP NO.: _____

Specimens were prepared from Hose Numbers 3, 4 and 5 in accordance with the TP Paragraph 12.B.5 and weighed to the nearest milligram in air (W_1) and in distilled water (W_2).

Each specimen was immersed in ASTM No. 3 oil for 70 hours at 207ºF to 212ºF and then cooled for 30 to 60 minutes. Specimens were each weighed in a tared weighing bottle (W_3) and in distilled water (W_4) within 5 minutes after removal from the cooling liquid.

The percent increase in volume was calculated as follows:

$$\text{Percent of Increase} = \frac{(W_3 - W_4) - (W_1 - W_2)}{(W_1 - W_2)} \times 100$$

	DATE	TIME	TEMPERATURE (ºF)
OVEN TEST START			
OVEN TEST END			
COOL PERIOD END			

	HOSE #3	HOSE #4	HOSE #5
Wt. in air (W_1) mg			
Wt. in water (W_2) mg			
Wt. in bottle (W_3) mg			
Wt. in water (W_4) mg			
Percent Increase			
PASS			
FAIL			

The average percent increase in volume = _____ %. (100% max.)

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-6

AIR BRAKE HOSE OZONE TEST - 70 HOURS

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE NO.: __6__ ; HOSE NOMINAL O.D.: _____ inches

CYLINDER DIAMETER = 8 x HOSE NOMINAL O.D. = _____ inches

	TIME	DATE
START OF TEST		
END OF TEST		
TOTAL EXPOSURE TIME (hours) =		

The brake hose was bound around a cylinder with a diameter of _____ inches and conditioned at room temperature for 24 hours.

The brake hose and cylinder were then exposed to an ozone concentration of 50 parts per 100 million by volume for 70 hours at a temperature of 98 to 104ºF.

Examination of the hose under 7 power magnification yielded the following results -

TEST RESULTS:

PASS	FAIL

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-7

AIR BRAKE HOSE LENGTH CHANGE TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

TEST DATE: _____ ; HOSE NOMINAL I.D.: _____ inches

The hose was positioned in a straight horizontal position and pressurized to 9.5 to 10 psig, and the free length measured. Pressure was increased to 195 to 200 psig and the free length re-measured.

	@ 10 psig	@ 200 psig	PASS	FAIL
Hose Free Length (in.)				

The Free Length Change = _____ %. (-7% to +5%)

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-8

AIR BRAKE HOSE ADHESION TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

TEST DATE: _____ ; SAMPLE LENGTH: _____ inches

Hose #8 was prepared in accordance with the TP Paragraph 12.B.2 and installed in the Adhesion Test Device. The moving head travel was 1.0 inch per minute with a permanent recording of Tension vs. Displacement.

Minimum Force Recorded (lbs.)	Adhesion Value (lbs./in.)	Minimum Allowable (lbs./in.)	PASS	FAIL
		8		

Record data for all layers.

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-9

AIR BRAKE HOSE AIR PRESSURE TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

TEST DATE: _____ ; HOSE NO.: 9

Hose #9 was pressurized to 195 to 200 psig and isolated from the pressure source. After a 5 minute (± 5 seconds) hold, the final pressure was recorded. Pressure decay shall not exceed 5 psi.

Initial Pressure (psig)	Final Pressure (psig)	Pressure Decay During 5 Min. Hold (psig)	PASS	FAIL

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-10

AIR BRAKE HOSE BURST STRENGTH TEST

GROUP NO.: _____ ; TEST DATE: _____

AMBIENT TEMPERATURE: _____ ºF.

The hose was connected to the pressure source and completely filled with water.

After all air was eliminated in the hose, the relief valve was closed and pressure applied at the rate of 800 to 1,000 psi per minute until the specimen burst or reached 800 psi minimum.

HOSE NUMBER	ACTUAL PRESSURE ATTAINED, psig	MINIMUM ALLOWABLE BURST STRENGTH	PASS	FAIL
10		800 psig		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-11

AIR BRAKE HOSE TENSILE TEST

GROUP NO.: _____ ; TEST DATE:

HOSE SIZE: _____ inches AMBIENT TEMP.: _____ ºF

VEHICLE APPLICATION: _____
(Relative motion unless otherwise noted)

The hose assembly was mounted in the tensile machine so that the hose and end fittings had a straight centerline corresponding to the direction of the machine pull.

The hose assembly was pulled at a rate of 1 inch per minute until failing as follows:

A. Hose pulled out of the end fitting
B. Hose ruptured

HOSE NO.	ACTUAL TOTAL LOAD AT TIME OF FAILURE (lbs)	TYPE OF FAILURE	MIN. ALLOWABLE TENSILE STRENGTH	PASS	FAIL
11			325 lbs		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-12

AIR BRAKE HOSE WATER ABSORPTION - TENSILE TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE FREE LENGTH: _____ inches ; HOSE NOMINAL I.D.: _____ inches

	TIME	DATE
START OF IMMERSION TIME		
END OF IMMERSION TIME		
TOTAL IMMERSION TIME (hours) =		

The hose was prepared and immersed in distilled water at room temperature for 68 to 70 hours. Within 30 minutes after removal from the water, the Tensile Strength Test was started in accordance with TP Paragraph 12.B.12.

HOSE NO.	ACTUAL TOTAL LOAD AT TIME OF FAILURE (lbs)	TYPE OF FAILURE (A or B)	MIN. ALLOWABLE TENSILE STRENGTH	PASS	FAIL
12			325 lbs		

FAILURE TYPES: A = Hose pulled out of end fitting
B = Hose ruptured

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-13

AIR BRAKE HOSE ZINC CHLORIDE RESISTANCE TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

	TIME	**DATE**
START OF IMMERSION TIME		
END OF IMMERSION TIME		
TOTAL IMMERSION TIME (hours) =		

Hose #13 shall be immersed in a 50 percent zinc chloride aqueous solution at room temperature for 200 hours. After that time, the hose was removed from the solution and examined under 7-power magnification. Inspection of the hose yielded the following:

TEST RESULTS:

PASS	**FAIL**

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-14

AIR BRAKE HOSE SALT SPRAY TEST - 24 HOURS

GROUP NO.:

The hose assembly was subjected to a Salt Spray test for 24 hours in accordance with the testing method of Salt Spray (Fog) Testing ASTM B117-64.

The temperature in the salt chamber was continuously recorded.

HOSE #14	DATE	TIME	SALT SOLUTION PROP.		EVIDENCE OF RUST OR CORROSION
			Sp.Gr.@95±2ºF	Ph	
IN Cabinet					
OUT Cabinet					

TEST RESULTS:

PASS	FAIL

REMARKS: (Note all interruptions in test, cause, and length of time)

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET A-15

AIR BRAKE HOSE TRACER CORD COLOR IDENTIFICATION TEST

GROUP NO.: _____ ; TEST DATE:

After completion of all tests, remove a portion of the hose outer cover in all NONFAILING samples to determine the color of the tracer cord woven into the outer braid; tracer cord may be woven into inner braid on some hose assemblies.

SPECIMEN NO.	CORD COLOR	R.M.A. IDENTIFICATION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

SUMMARY OF VACUUM BRAKE HOSE TESTING RESULTS

GROUP NO.: _____ ; NOMINAL HOSE I.D.: _____ inches

VEHICLE MFR: _____ ; PART NO.: _____

HOSE ASSY MFR: _____ ; PART NO.: _____

HOSE STOCK MFR.: _____

TYPE HOSE ASSY: ____-Vehicle Specific*; ____-Aftermarket (NON-OEM)*; ____-Special Test*
* NOT subject to Label Inspection PASS/FAIL criteria.

TYPE OF END FITTING: ____-Permanent; ____-Reusable; ____-Renewable

SUMMARY: (P = PASSED, F = FAILED, N/A = NOT APPLICABLE)

		HOSE NUMBER									
TEST NAME		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
01	Label Inspection										
02	Constriction Test										
03	High Temperature Test										
04	Cold Box Test										
05	Ozone Test										
06	Burst Test										
07	Vacuum Test										
08	Bend Test										
09	Swell Test										
10	Adhesion Test										
11	Deformation Test										
12	Salt Spray Test										
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

REMARKS:

RECORDED BY: _____ ; DATE: _____
APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-1A

VACUUM BRAKE HOSE LABELING INSPECTION - HOSE

GROUP NO.: _____ ; TEST DATE: _____

TYPE OF ASSY: ___-Veh Specific*; ___-Aftermarket (NON-OEM)*; ___-Special Test*
* Labeling NOT subject to PASS/FAIL criteria.

MARKINGS ON HOSE: DOT Line- _____
Other Line-

HOSE NUMBER	DATE CODE ON HOSE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
SPARE	

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-1B

VACUUM BRAKE HOSE LABELING INSPECTION - ASSEMBLY

GROUP NO.: _____ ; TEST DATE: _____

AFTERMARKET ASSY: ____-Yes; ____-No

MARKINGS ON BAND:
(Metal band unless otherwise noted)

MARKING OPTION SELECTED: ____-Yes; ____-No
(If YES, see Data Sheet V-1C for PASS/FAIL judgment)

HOSE NO.	DOT MARK	MANUFACTURER'S MARK	PASS, FAIL or N/A
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
SPARE			

REMARKS:

RECORDED BY: _____ ; DATE: _____
APPROVED BY: _____

DATA SHEET V-1C

VACUUM BRAKE HOSE LABELING INSPECTION - END FITTINGS

GROUP NO.: _____ ; TEST DATE: _____

TYPE OF END FITTINGS: ____-Permanent*; ____-Reusable; ____-Renewable*
* NOT subject to Label Inspection PASS/FAIL criteria.

MARKINGS ON END FITTINGS:
(Each end of hose assembly must be marked with an "A" or "B" by the laboratory)

HOSE #	"A" END _____	"B" END _____	P,F,N*
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
SPARE			

* P = PASS, F = FAIL, N/A = NOT APPLICABLE

REMARKS:

RECORDED BY: _____ ; DATE: _____
APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-2

VACUUM BRAKE HOSE CONSTRICTION TEST

GROUP NO.: _____; TEST DATE: _____

AMBIENT TEMP.: _____ºF;HOSE NOMINAL I.D.: _____"

PLUG SIZE USED*: _____" (NOTE: _____" Maximum Diameter for _____" I.D. hose)
* See TP Paragraph 12.C.2 for proper plug size

Each end of the hose assembly must be marked with an "A" or "B" by the laboratory.

The constriction of the bore was measured at both ends using the size gage plug indicated above.

HOSE NO.	END	PASS	FAIL	MAX. DRILL SIZE
1	A B	_____	_____	_____
2	A B	_____	_____	_____
3	A B	_____	_____	_____
4	A B	_____	_____	_____
5	A B	_____	_____	_____
6	A B	_____	_____	_____
7	A B	_____	_____	_____
8	A B	_____	_____	_____
9	A B	_____	_____	_____
10	A B	_____	_____	_____
Spare	A B	_____	_____	_____

REMARKS:

RECORDED BY: _____ ; DATE: _____
APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-3

VACUUM BRAKE HOSE HIGH TEMPERATURE TEST

GROUP NO.: _____ ; HOSE NOMINAL I.D.: _____ inches

	TIME	DATE
START OF HIGH TEMPERATURE TEST		
END OF HIGH TEMPERATURE TEST		
TOTAL TEST TIME (hours) =		

Hose #1 was secured around a cylinder with a diameter of _____ inches and placed in an air oven for 70 hours at 207ºF to 212ºF. After removal and cooling, the hose was hand straightened and inspected.

TEST RESULTS:

PASS	FAIL

External Inspection - _____

Internal Inspection - _____

HOSE NOMINAL I.D.	TEST CYLINDER DIA. (+.03,-0)
1/8"	3.0"
3/16"	4.0"
1/4" OR 3/8" OD	5.0"
5/16"	6.0"
3/8" AND 11/32"	7.0"
7/16" AND 1/2"	8.0"
5/8"	9.0"

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-4

VACUUM BRAKE HOSE COLD BOX TEST

GROUP NO.: _____ ; HOSE NOMINAL I.D.: _____ inches

The hose assembly was conditioned in the cold box in a straight position or natural position at -35ºF to -40ºF for 70 hours.

After the conditioning period and while still at this temperature, the hose assembly was bent around a wood mandrel of the diameter noted in the "REMARKS" section.

All cracks and breaks are noted below.

HOSE #2	DATE	TIME	BOX TEMPERATURE (ºF)	EVIDENCE OF CRACKS OR BREAKS
IN BOX				
OUT BOX				
TOTAL EXPOSURE TIME =				

TEST RESULTS:

PASS	FAIL

Wood Mandrel diameter used = _____ inches

HOSE NOMINAL I.D.	TEST CYLINDER DIA. (+.03,-0)
1/8"	3.0"
3/16"	4.0"
1/4" OR 3/8" OD	5.0"
5/16"	6.0"
3/8" AND 13/32"	7.0"
7/16" AND 1/2"	8.0"
5/8"	9.0"

RECORDED BY: _____ ; DATE: _____
APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-5

VACUUM BRAKE HOSE OZONE TEST - 70 HOURS

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

HOSE NO.: 3 ; HOSE NOMINAL O.D.: _____ inches

CYLINDER DIAMETER = 8 x HOSE NOMINAL O.D. = _____ inches

	TIME	DATE
START OF TEST		
END OF TEST		
TOTAL EXPOSURE TIME (hours) =		

The brake hose was bound around a cylinder with a diameter of _____ inches and conditioned at room temperature for 24 hours.

The brake hose and cylinder were then exposed to an ozone concentration of 50 parts per 100 million by volume for 70 hours at a temperature of 98 to 104ºF.

Examination of the hose under 7-power magnification yielded the following results -

TEST RESULTS:

PASS	FAIL

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-6

VACUUM BRAKE HOSE BURST STRENGTH TEST

GROUP NO.: _____ ; TEST DATE: _____

AMBIENT TEMPERATURE: _____ ºF.

The hose was connected to the pressure source and completely filled with water.

After all air was eliminated in the hose, the relief valve was closed and pressure applied at the rate of 800 to 1,000 psi per minute until the specimen burst or reached 350 psi minimum.

HOSE NUMBER	ACTUAL PRESSURE ATTAINED, psig	MINIMUM ALLOWABLE BURST STRENGTH	PASS	FAIL
4		350 psig		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-7

VACUUM BRAKE HOSE VACUUM TEST

GROUP NO.: _____ ; TEST DATE: _____

AMBIENT TEMPERATURE: _____ ºF.

The Outside Diameter (O.D.) of Hose #5 was measured and the hose was subjected to an internal vacuum of 25 to 26 inches of mercury for 5 minutes and the O.D. re-measured while the hose was still under vacuum. The O.D. shall not contract in excess of 1/16 inches.

Vacuum = _____ inches of Hg.

	PRETEST O.D. (in.)	AT VACUUM O.D. (in.)	CHANGE (in.)	ALLOWABLE (in.)	PASS	FAIL
Hose #5						

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-8

VACUUM BRAKE HOSE BEND TEST

GROUP NO.: _____ ; TEST DATE: _____

AMBIENT TEMP.: _____ ºF. NOMINAL HOSE ID: _____ inches

Hose #6 was cut to the length below and bent in its direction of normal curvature until the ends touched. The hose Outside Diameter (O.D.) was measured before and after bending. The allowable differences in diameters (collapse) are shown in Table 3 of the TP.

Hose Length = _____ inches

	O.D. PRIOR TO BEND (in.)	O.D. AT BEND (in.)	CHANGE (in.)	ALLOWABLE (in.)	PASS	FAIL

Hose #6						

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-9

VACUUM BRAKE HOSE SWELL TEST

GROUP NO.: _____ ; AMBIENT TEMP.: _____ ºF

HOSE TYPE: _____-VL; _____-VH; HOSE NOMINAL I.D.: _____ inches

Hose #7 was cut into a 12-inch length and filled with Reference Fuel A in accordance with ASTM D471-64. The hose was maintained at ambient temperature and pressurized for 48 hours.

	TIME	**DATE**
START OF TEST		
END OF TEST		
TOTAL TEST TIME (hours) =		

The **CONSTRICTION TEST** was performed in accordance with TP Paragraph 12.C.6.

HOSE NO.	HOSE END	PASS	FAIL
7	A		
	B		

The **VACUUM TEST** was performed in accordance with TP Paragraph 12.C.8.

Vacuum = _____ inches of mercury (Hg)

TEST RESULTS:

PASS	FAIL

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-10

VACUUM BRAKE HOSE ADHESION TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

TEST DATE: _____ ; SAMPLE LENGTH: _____ inches

Hose #8 was prepared in accordance with the TP Paragraph 12.B.2 and installed in the Adhesion Test Device. The moving head travel was 1.0 in./minute with a permanent recording of tension vs. displacement.

Minimum Force Recorded (lbs.)	Adhesion Value (lbs./in.)	Minimum Allowable (lbs./in.)	PASS	FAIL
		8		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-11

VACUUM BRAKE HOSE DEFORMATION TEST

GROUP NO.: _____ ; AMBIENT TEMPERATURE: _____ ºF

TEST DATE: _____ ; HOSE NOMINAL I.D.: _____ inches

HOSE TYPE: _____-VL; _____-VH

Hose #9 was positioned longitudinally in the compression device with the fabric laps not in the line of the applied force and a gradually increasing force was applied to the test specimen to compress its Inside Diameter (I.D.) to the dimension "D" for the size of the hose tested. After 5 seconds the force was released and the peak load recorded. The procedure was repeated 4 times permitting a 10-second recovery period between load applications.

FORCE APPLICATION		FORCE (lbs.)
1	less than 70 lbs for HD hose	
	less than 50 lbs for LD hose	
2		

3		
4		
5	more than 40 lbs for HD hose	
	more than 20 lbs for LD hose	

Hose Original O.D. = _____ inches

Compression Dimension (D) = _____ inches
(from Table 4 of Paragraph 12.C.11)

Post Load O.D. = _____ inches

% of Original O.D. = _____ % (Allowable = 90%; Wire Reinforced Allowable = 85%)

PASS	FAIL

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-12

VACUUM BRAKE HOSE SALT SPRAY TEST - 24 HOURS

GROUP NO.: _____

The hose assembly was subjected to a Salt Spray test for 24 hours in accordance with the testing method of Salt Spray (Fog) Testing ASTM B117-64.

The temperature in the salt chamber was continuously recorded.

HOSE #14	DATE	TIME	SALT SOLUTION PROP.		EVIDENCE OF RUST OR CORROSION
			Sp.Gr.@95±2ºF	Ph	
IN Cabinet					
OUT Cabinet					

TEST RESULTS:

PASS	FAIL

REMARKS: (Note all interruptions in test, cause, and length of time)

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

15. DATA SHEETS....Continued

DATA SHEET V-13

VACUUM BRAKE HOSE TRACER CORD COLOR IDENTIFICATION TEST

GROUP NO.: _____ ; TEST DATE: _____

After completion of all tests, remove a portion of the hose outer cover in all NONFAILING samples to determine the color of the tracer cord woven into the outer braid; tracer cord may be woven into inner braid on some hose assemblies.

SPECIMEN NO.	CORD COLOR	R.M.A. IDENTIFICATION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

REMARKS:

RECORDED BY: _____ ; DATE: _____

APPROVED BY: _____

16. FORMS

LABORATORY NOTICE OF TEST FAILURE TO OVSC

FMVSS 106 TEST DATE: _____

LABORATORY: _____

CONTRACT NO.: _____; DELV. ORDER NO.: _____

LABORATORY PROJECT ENGINEER'S NAME: _____

TEST SPECIMEN DESCRIPTION - -

MANUFACTURER: _____

MODEL: _____

_____

PART NO.: _____

TEST FAILURE DESCRIPTION: _____

_____

_____

FMVSS REQUIREMENT, PARAGRAPH §____ : _____

_____

_____

_____

NOTIFICATION TO NHTSA (COTR): _____

DATE: _____ BY: _____

REMARKS

16. FORMS....Continued

MONTHLY TEST STATUS REPORT

FMVSS 106

DATE OF REPORT:

GROUP NO.	VEHICLE MANUFACTURER AND MODEL	TEST START DATE	TEST COMPLETE DATE	PASS / FAIL	DATE FINAL REPORT SUBMITTED
001					
002					
003					
004					
005					
006					
007					
008					
009					
010					
011					
012					
013					
014					
015					
016					
017					
018					
019					
020					

REMARKS:

16. FORMS....Continued

MONTHLY INVENTORY STATUS REPORT

FMVSS 106

DATE OF REPORT:

GROUP NO.	MANUFACTURER'S NAME	MODEL	NUMBER OF SPECIMENS RECEIVED	CONDITION OF SAMPLE	DATE RECEIVED
001					
002					
003					
004					
005					
006					
007					
008					
009					
010					
011					
012					
013					
014					
015					
016					
017					
018					
019					
020					

REMARKS:

APPENDIX A

INTERPRETATIONS OR DEVIATIONS FROM FMVSS 106

This Test Procedure (TP) is written in coordination with FMVSS 106 and is in no way intended to conflict with the requirements set forth in the standard and must be followed by the laboratory while conducting minimum performance compliance tests to FMVSS 106 for the Office of Vehicle Safety Compliance (OVSC), National Highway Traffic Safety Administration (NHTSA). If the testing laboratory interprets any part of this procedure to be in conflict with FMVSS 106, it will advise the Contracting Officer's Technical Representative (COTR) and resolve the discrepancy prior to testing to FMVSS 106.

Interpretations and/or deviations from this TP shall be shown in Appendix A of the Final Test Report.

APPENDIX B

EQUIPMENT LIST AND CALIBRATION SCHEDULES

TEST GROUP NO.: _____ ; INSP. DATE:_____

TESTING LABORATORY: _____

NOTE: Information to be included for each item of test instrumentation is as follows:

EQUIPMENT DESCRIPTION: _____

EQUIPMENT MANUFACTURER: _____

TYPE AND/OR MODEL: _____

SERIAL NUMBER: _____

LIMITS: _____

ACCURACY: _____

FREQUENCY OF CALIBRATION: _____

EXPIRATION OF CALIBRATION: _____

USED ON TEST NUMBER: _____

REMARKS:

RECORDED BY: _____ ; DATE:_____

APPROVED BY: _____

APPENDIX C

PHOTOGRAPHS

The test setup and equipment used therein are to be photographed for the record and the photographs inserted in this Appendices or a part of the Final Test Report. Normally one photograph of the test setup and equipment will suffice unless the setup is complicated and/or spread out thereby requiring two or more photographs. The equipment in the photos must agree with those items noted in Appendix B. Each photo must be accompanied by a suitable caption.

Include photos of test equipment and instrumentation used in conducting the following tests:

HYDRAULIC BRAKE HOSES -
(01) Volumetric Expansion Test
(02) Bursting Strength Test
(03) Whip Machine - Side View
(04) Whip Machine - End View
(05) Tensile Test Machine
(06) Interior of Cold Box with wood mandrel
(07) Salt Spray Cabinet
(08) Ozone Cabinet
(09) Water Absorption Setup
(10) Brake Fluid Compatibility Oven (Interior)

AIR BRAKE HOSES -
(01) High Temperature Test (Interior)
(02) Cold Box (Interior)
(03) Oil Resistance Test
(04) Ozone Cabinet
(05) Length Change Test
(06) Adhesion Test
(07) Air Pressure Test
(08) Burst Strength Test
(09) Tension Test
(10) Water Absorption Setup
(11) Salt Spray Cabinet

VACUUM BRAKE HOSES -
(01) High Temperature Test (Interior)
(02) Cold Box (Interior)
(03) Ozone Cabinet
(04) Burst Strength Test
(05) Vacuum Test
(06) Bend Test
(07) Adhesion Test
(08) Deformation Test
(09) Salt Spray Cabinet